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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/569,490	05/16/2008	Yoichi Kowatari	080306.57395US	3451

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EXAMINER
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LESLIE, MICHAEL S

ART UNIT	PAPER NUMBER
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3745

MAIL DATE	DELIVERY MODE
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08/18/2011

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/569,490	<b>Applicant(s)</b> KOWATARI ET AL.	
	<b>Examiner</b> MICHAEL LESLIE	<b>Art Unit</b> 3745	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ An election was made by the applicant in response to a restriction requirement set forth during the interview on \_\_\_\_; the restriction requirement and election have been incorporated into this action.
- 4) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 5) ☒ Claim(s) 1-6 is/are pending in the application.
- 5a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 6) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 7) ☒ Claim(s) 1-6 is/are rejected.
- 8) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 9) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 10) ☒ The specification is objected to by the Examiner.
- 11) ☒ The drawing(s) filed on 27 February 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 12) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                       | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. ____.                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>2/27/2006</u> .   | 6) <input type="checkbox"/> Other: ____.                          |

## **DETAILED ACTION**

### ***Specification***

The abstract of the disclosure is objected to because it exceeds the limit of 150 words. Correction is required. See MPEP § 608.01(b).

### ***Claim Objections***

Claims 1 and 3 are objected to because of the following informalities: Claim 1, Line 5, “of” should be --for--; Claim 3, Line 3, “increment torque” should be --increment rate--. Appropriate correction is required.

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-6 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The term "around" in claim 1, line 15 is a relative term which renders the claim indefinite. The term "around" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. The pump torque that is established by the “second torque control means” is rendered indefinite.

Art Unit: 3745

Claims 2-6 are rejected due to their dependence from claim 1.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1 and 2 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fujita et al (JP 2000-154803) in view of Aihara (JP 2000-161302).

Fujita et al disclose an engine lag down control system for construction machinery provided with an engine (1), a main pump (2) driven by the engine, a torque regulating means (8, 11-14) for regulating a maximum pump torque of the main pump, a hydraulic actuator (5) driven by pressure fluid delivered from the main pump, and a control device (4) for controlling the hydraulic actuator, the engine lag down control system including a first torque control means (110A) for controlling the torque regulating means to a predetermined low pump torque lower than the maximum pump torque when a non-operated state of the control device has continued beyond a predetermined monitoring time, and a second torque control means (122A) for controlling the torque regulating means to the predetermined low pump torque or to a pump torque around the predetermined low pump torque for a predetermined holding time subsequent to an operation of the control device from the non-operated state while the torque regulating means is being controlled by the first torque control means, to control small a temporary reduction in engine revolutions that occurs upon operation of the control device from the non-

Art Unit: 3745

operated state, characterized in that the engine lag down control system is provided with a third torque control means (140A) for controlling the torque regulating means such that from a time point of a lapse of the predetermined holding time, the pump torque of the main pump increases. Fujita et al do not explicitly teach that the pump torque of the main pump gradually increases at a predetermined torque increment rate as time goes on, wherein the third torque control means comprises a means for controlling the torque increment rate to be held constant during a change from the predetermined low pump torque to a maximum pump torque corresponding to a target number of revolutions of the engine.

Aihara teaches an engine lag down control system having a torque control means (51, 53, Figs. 5, 6) that controls the pump torque of the main pump to gradually increases at a predetermined torque increment rate as time goes on, wherein the third torque control means comprises a means for controlling the torque increment rate to be held constant during a change from the predetermined low pump torque to a maximum pump torque corresponding to a target number of revolutions of the engine.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the third torque control means of Fujita et al to control the pump torque of the main pump to gradually increases at a predetermined torque increment rate as time goes on, wherein the third torque control means comprises a means for controlling the torque increment rate to be held constant during a change from the predetermined low pump torque to a maximum pump torque corresponding to a target number of revolutions of the engine as taught by Aihara for the purpose of maximizing engine efficiency during pump operation.

Art Unit: 3745

***Allowable Subject Matter***

Claims 3-6 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Art Unit: 3745

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MICHAEL LESLIE whose telephone number is (571)272-4819. The examiner can normally be reached on M-F 8:00am - 4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Look can be reached on (571) 272-4820. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

ML  
August 15, 2011

/Michael Leslie/  
Primary Examiner, Art Unit 3745